In the Specification:

Please amend paragraphs [0009] and [0010] as follows:

[0009] This object is attained by an apparatus for TIR microscopy in accordance with the invention ~~as defined in claims 1 and 16~~. The invention is beneficial in that laser light beams, which have been coupled into the apparatus under conditions which do not result in TIR – and which hence may escape from the set up with virtually no attenuation – are masked out already by the coupling element. A further benefit is the simple design, wherein the coupling element is used not only for coupling the TIR excitation light into the microscope, but simultaneously also serves to couple normal epi-illumination light into the microscope and/or for decoupling light emitted by the sample from the microscope. Thereby simultaneously another essential requirement of practical TIRF systems is achieved: it is possible to realize the option to supplement information obtained by TIRF methods by classical epi-illumination methods by simultaneously illuminating the sample with normal epi-illumination light or by illuminating the sample with normal epi-illumination light shortly after illumination of the sample with light for TIRF excitation.

[0010] Fig. 1 is a schematic diagram ~~(Fig. 1A side view, Fig. 1B top view)~~ of an embodiment of the invention comprising a microscope objective lens and a coupling element in the back focal plane of the microscope objective lens in side and top views;

Please amend paragraph [0014] as follows:

[0014] Fig. 5 is a schematic diagram ~~(Fig. 5A top view; Fig. 5B front view)~~ of an embodiment of an embodiment of a coupling element for non-coherent light having the shape of a cut cone in top and front views.

Please amend paragraphs [0023] and [0024] as follows:

[0023] The back focal plane of the objective and all conjugate planes thereof allow the combination of beams, which are meant to reach the sample under different angles, by the fact that the beams occupy different regions of this plane. Thus different illumination light beam paths may be combined in these planes without the use of beam splitter elements which are usually employed for this purpose. In the example shown in Fig. 2 the incident laser light

119 for TIR illumination from the light source L is focused ~~focussed~~ onto a first area 120 of the coupling element 124, with the first area 120 being transparent for the TIR illumination light. The focal spot 118 achieved thereby is imaged into a focus 126 in the back focal plane of the microscope objective lens 10 by utilizing two lenses 123 and 127. The further optical beam path is identical to that shown in Fig. 1. By providing a reflective second area 125 a beam for wide field epi illumination may be combined with the focused beam used for TIR-illumination.

[0024] In Fig. 2 two detectors 6 and 8 are schematically shown. Detector 6 serves to measure a signal, which is proportional to the power of the TIR illumination light 119, and detector 8 serves to measure the power of the totally reflected light 121, which, after being reflected backwards in a symmetrical fashion, passes an area 122, corresponding to area 120 in the illumination path. Only a small fraction of both forward- and back-reflected beam is needed, it can be provided by a suitable beam splitter 140. If the ratio of these two measured power values do not match, indicating that no total internal reflection occurs or occurs only partially, a protective shut-down unit[[,]] ~~which is not shown in Fig. 2,~~ reduces the laser intensity down to levels which are safe to the operator. The shut-down unit can be incorporated into a control C that is capable of maintaining the intensity of the light for total internal reflection illumination of said sample below a pre-determined threshold intensity if a ratio between the intensity of the light for total internal reflection illumination of the sample and the intensity of the light totally reflected by the sample exceeds a predetermined threshold ratio.